

BONDAR', N.G., prof., doktor tekhn.nauk; TIMOSHENKO, V.V., kand.tekhn,  
nauk; VYSOCHIN, B.M., kand.tekhn.nauk

Free vibrations in spans of hingeless arched bridges. Trudy  
DIIT no.27:65-84 ' 58. (MIRA 12:1)  
(Bridges, Arched--Vibration)

AUTHORS: Yefroymovich, Yu.Ye., Candidate of Technical Sciences, SOV/133-59-5-12/31  
Timoshenko, V.V. and Tsukanov, V.P., Engineers

TITLE: Rational Designs of Secondary Circuits for Arc Furnaces  
(Ratsional'nyye konstruktсии korotkikh setey dlya  
dugovykh pechey)

PERIODICAL: Stal', 1959, Nr 5, pp 421 .. 424 (USSR)

ABSTRACT: High and non-equal in phases reactive resistances of  
secondary circuits of present designs considerably  
decrease technico-economic indices of electric furnaces.  
When operating with the present designs of the circuits,  
an increase in the nominal secondary voltage of the  
transformer permits improving furnace operation only  
during the first half of the melting period. For this  
reason, two new designs of secondary circuits for arc  
furnaces were proposed. In these, the inlet and outlet  
tappings of secondary windings (I, II, III) of the  
transformer are "lengthened", using busbar, flexible  
cables and copper, water-cooled tubes and lead in a  
bifilar manner (a - x, b - y, c - z) directly to  
electrode (1, 2, 3) on which the windings become

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Rational Designs of Secondary Circuits for Arc Furnaces SOV/133-59-5-12/31

$\Delta$  connected (Figure 1). As a result, the linear current passes only through electrodes on all the remaining sectors of the secondary circuit only phase currents of the transformer pass. The proposed two schemes (A and B, Figure 1) differ in the positions of outlet trappings from winding III of the transformer. The above schemes were in 20 and 5 and 20 ton furnaces, respectively; the comparison of operating parameters of furnaces with the typical and new designs of the secondary circuits is given in Table 1. The use of secondary circuits of the proposed designs permits decreasing their reactive resistance by a factor of 1.5 - 2.5 and active resistance by about 10-15%. The secondary circuit according to Scheme B has a 15-20% lower reactance than that according to Scheme A. This enables equalising the arc capacities, speeding up the

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Rational Designs of Secondary Circuits for Arc Furnaces SOV/133-59-5-12/31

melting process, reducing specific power consumption  
and noticeably improving the power coefficient.  
There are 2 figures and 2 tables.

ASSOCIATIONS: TsLA and Zavod "Elektrostal'" ("Elektrostal'" Works)

Card 3/3

TIMOSHENKO, V.V., dots., kand.tekhn.nauk

Calculating dynamics of arches of massive long-span bridges.  
Trudy DIIT no.27:106-130 ' 58. (MIRA 12:1)  
(Bridges, Concrete--Design)

SEL'KIN, N.Ye., inzh.; TIMOSHENKO, V.V., inzh.

Mounting the MKP-35 circuit breaker separately from its drive  
in a covered 35 kv. distribution system. Elek.sta. 29 no.11:  
79-80 N '58. (MIRA 11:12)

(Electric circuit breakers)

TIMOSHENKO, Valentin Vasil'yevich; TAYTS, A.A., red.; MIKHAYLOVA,  
Ye.P., red. izd-va; MIKHAYLOVA, V.V., tekhn. red.

[Economizing electric power in electrometallurgical  
enterprises] Ekonomiya elektroenergii na elektrometallurgi-  
cheskikh predpriyatiyakh. Moskva, Metallurgizdat, 1962. 189 p.  
(MIRA 16:7)

(Electrometallurgy) (Electric power)

TIMOSHENKO, N. YE.

FAYZULLIN, F.F.; DEZIDER'YEVA, I.P.; TIMOSHENKO, N.Ye.

Effect of texture on anodic behavior of copper in certain  
electrolyte solutions. Uch.zap.Kaz.un. 115 no.3:123-137 '55.

(MLRA 10:5)

1.Kafedra fizicheskoy khimii.

(Copper--Electrometallurgy)



TIMOSHENKO, N.Ye.

DEZIDER'YEVA, I.P.; TIMOSHENKO, N.Ye.

Anodic polarization of cadmium in sodium hydroxide solutions.  
Uch.zap.Kaz.un. 116 no.1:158-161 '55. (MLRA 10:5)

1.Kafedra fizicheskoy khimii.  
(Cadmium) (Polarization (Electricity))  
(Sodium hydroxide)

TIMOSHENKO, O. A.

6306. Timoshenko, O. A. Eksperimental'noye izucheniye raspredeleniya deformatsiy po naimen'shemu secheniyu nadrezannogo obraztsa pri rastyazhenii. L., 1954. 14s. 21sm. (M-vo vyssh. obrazovaniya SSSR. Leningr. politekhn. in-t im. M. I. kalinina). 100 ekz. B. Ts. - 54-58147

SO: Knizhamya Letonis' 1, 1955

TIMOSHENKO, O. A.

PA 38/49T84

USSR/Engineering

Mar 49

Stresses

Strength - Testing

"A Generalization of the Statistical Theory of Strength in a Nonuniform Stress State," T. A. Kantorov, O. A. Timoshenko, Leningrad Phys Tech Inst, Acad Sci USSR, Leningrad Polytech Inst Imeni M. I. Kalinin, 16 pp

"Zhur Tekh Fiz" Vol XIX, No 3 -p.357-70

Kantorov previously had developed the statistical theory of brittle strength for solids which was applicable to the uniform stress state of a material. Inasmuch as the dimensional factor

38/49T84

USSR/Engineering (Contd)

Mar 49

is observed in experiments, not only in the case of tension and compression of samples, but also in testing for bending strength, it is considered necessary to extend this theory to the more general case of nonuniform stress states. Submitted 21 Nov 48.

Induction 6-81183, 15 Dec 54

38/49T84

TIMOSHENKO, O.A.

"Experimental Study of the Distribution of Strains Over the Smallest Cross  
Section of a Notched Specimen Under Tension." CandTech Sci, Leningrad Polytechnic  
Inst imeni M. I. Kalinin, Min Higher Education USSR, Leningrad, 1954. (KL, No 5,  
Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher  
Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

TIMOSHENKO, S., Marshal Sovetskogo Soyuz.

Forty years in the defense of the Soviet motherland. Tankist. no.2:  
1-7 P '58. (MIRA 11:3)

(Russia--Armed forces)

TIMOSHENKO, S. P.

"Stability in flexible systems", (Ustoychivost uprugikh sistem), published by the State House for Technical-Theoretical Literature, Moscow-Leningrad 1946.

TIMOSHENKO, SP.

USSR/Physics - Elasticity Theory

Feb 53

"Solutions to the Equations of Equilibrium in the Axisymmetrical Problem of Elasticity Theory," S. I. Trenin, Chair of Elasticity Theory, Moscow St. U

Vest Moskov U, Ser Fiz-Mat i Yest Nauk, No 1, pp 7-14

Considers the solution to the eqs of equilibrium of the axisymmetrical problem of elasticity theory which were obtained by S. P. Timoshenko, B. G. Galerkin, P. F. Papkovich, A. Lyav, A. Fepl and L. Fepl, and V. K. Prokopov. Here the author clarifies the following three matters: (a) the role of limitations which are imposed on the stress function when the equilibrium eqs are satisfied by the solns; (b) their mutual connection and the possibility of their transitions from one form of soln to another; (c) their generality. Presented 12 Apr 52.

269T95

15

CA TIMOSHENKO S. V.

Results of experiments on the irrigation of tobacco. S. V. TIMOSHENKO. *All-Union Inst. Tobacco Ind. (U. S. S. R.) (formerly Inst. Tobacco Culture), Bull. No. 83, 1-28(1932).*—T. presents data showing how surface and overhead irrigation affect the chem. compn. of tobacco. The protein content decreases with the increase of water supplies. The nicotine content—per unit weight of dry matter—increases. The ash content decreases. The Shmuk no. (ratio of carbohydrate to protein) is directly related to the intensity of irrigation. J. S. Jovan

ASH-51A DETALLURGICAL LITERATURE CLASSIFICATION

62-7



S/073/63/029/001/008/009  
A057/A126

AUTHORS: Kul'skiy, L.A., Kachan, A.A., Sherstoboyeva, M.A., Timoshenko, T.K.

TITLE: The catalytic activity of silver water upon the oxidation of indigo-carmin by hydrogen peroxide

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, v. 29, no. 1, 1963, 106 - 108

TEXT: The peroxidase activity of silver water (Agw) which is known as a strong bactericide was investigated at the Institut obshchey i neorganicheskoy khimii AN USSR, Belotserkovskiy institut (Institute of General and Inorganic Chemistry AS UkrSSR, Belotserkov Institute) using as a model the reaction between  $H_2O_2$  and indigocarmin (IC). The peroxidase activity of Agw was compared with the activity of silver ions, and solutions containing dispersed silver,  $Ag_2O$  and  $AgCl$ . The effect of casein was also studied. The experiments were carried out with  $5 \cdot 10^{-4}$  M IC solutions at pH  $\sim 5.9$ , and the reaction was controlled by measuring the optical density (605  $m\mu$ ) of the solution. It was observed, in agreement with literature data, that the reaction of IC decolorization with  $H_2O_2$  occurs by the first order in relation to IC. The obtained values of the reaction

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The catalytic activity of silver water upon ....

S/073/63/029/001/008/009  
A057/A126

rate constants for the oxidation of IC with  $H_2O_2$  demonstrate the peroxidase activity of Agw and also (but less) of  $Ag_2O$  colloidal silver, respectively. The activation energy is not changed by the presence of the catalyst, thus indicating the connection of the catalytic effect with an increase of the entropy of the system. This is assumed to be related to an increase of the number of active particles (formed by decomposition of  $H_2O_2$ ), which decompose IC more easily. The assumption was proved by experiments with an inhibitor (pyrophosphoric acid and  $\gamma$ -hydroxyquinoline). This inhibitor of the  $H_2O_2$  decomposition inhibited also the IC decomposition. It was also proved experimentally that Agw promotes the catalytic activity of casein on the oxidation of IC by  $H_2O_2$ . There are 3 figures and 1 table.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN USSR, Belotserkovskiy s/kh Insitut (Institute of General and Inorganic Chemistry AS UkrSSR, Belotserkovsk s/kh Institute)

SUBMITTED: February 16, 1962

Card 2/2

TIMOSHENKO, V.G. [Tymoshenko, V.H.] (Kiyev)

Calculation of bending vibrations in mechanical systems.

Prykl.mekh. 8 no.5:470-481 '62.

(MIRA 15:9)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR.  
(Beams and girders—Vibration)

TIMOSHENKO, V.G.

The use of a capacity transmitting element in recording mechanical vibrations. Vop.por.met.i prochn.mat. no.3:117-121 '56.(MLRA 9:8)  
(Vibration--Measurement)

TIMOSHENKO, V.G.

Automatic control of the temperature of a specimen heated by an  
~~electric~~ current during long duration tests. Volp. por. met.  
i prochn. mat. no.8:110-115 '60. (MIRA 13:8)  
(Metals—Testing) (Automatic control)

Timoshenko V.G.

The Application of a Capacity Device for Harmonic  
Motion

can be used for H.F. and low amplitudes (5-50  $\mu$ ) - N. E. B.

John ell

TIMOSHENKO, VLADINIR P.

Agricultural Russia and the wheat problem. Stanford University, Calif. Food Research Institute and the Committee on Russian Research, Hoover War Library, 1932.

571 p. maps, tables (Food Research Institute. Grain Economics Service, No. 1.)

*TIMOSHENKO, V.V.*

BCNDAR', N.G. [Bondar, M.H.]; TIMOSHENKO, V.V. [Tymoshenko, V.V.];  
VYSOCHIN, B.M. [Vysochyn, B.M.] (Dnipropetrovsk)

Natural vibrations of three-hinged parabolic arches [in Ukrainian  
with summary in Russian]. Prykl.mekh. 3 no.4:467-471 '57.  
(MIRA 11:2)

1.Dnipropetrovskiy institut inzheneriv transportu.  
(Arches--Vibration)



TIMOSHENKO, V. V.

PA 161T41

USSR/Electricity - Transformers  
Power Economy, Electric May 50

"Experience in Increasing the Power of Transformers,"  
V. V. Timoshenko, Engr, 1½ pp

"Prom Energet" No 5

Describes conversion of transformers from air cooling to water cooling. Conversion proved cheaper than adding enough air-cooled transformers to produce equal power, more economical in space required and in power consumption. Power economy for furnaces of metallurgical plants was 3-5% by increasing transformer loading 20% above rating. Urges extensive use.

FDD

161T41

*TIMOSHENKO V.YA.*

FERTMAN, G.I.; TIMOSHENKO, V.Ya.; MASLOVA, Ye.F., redaktor; KISINA, Ye.I.,  
tekhnicheskii redaktor.

[Technical and chemical control in liquor and vodka manufacture]  
Tekhno-khimicheskii kontrol' likero-vodochnogo proizvodstva.  
[Moskva] Gisleppishcheprom, 1953. 454 p. [Microfilm] (MLRA 7:11)  
(Distilling industries)

ТИМОШЕНКО, В. В.

Timoshenko, V. V.

"The Dynamics of Mass Arc Bridges with Long Spans." Moscow Order of Lenin and Order of Labor Red Banner Inst of Railroad Transport Engineers imeni I. V. Stalin. Moscow, 1955 (Dissertation for the degree of Candidate in Technical Sciences)

SO: Knizhnaya letopis' No. 27, 2 July 1955

TIMOSHENKO, V.V., kandidat tekhnicheskikh nauk.

Frequencies of free vibrations of sloping parabolic arches of variable  
cross section. Trudy DITF no.25:301-317 '56. (MIRA 10:1)  
(Arches--Vibration)

L 16735-66 EWT(d)/EWP(c)/EWP(v)/T/EWP(k)/EWP(l)/ETC(m)-6

ACC NR: AR9012357

UR/0276/66/000/004/1004/1004  
620.179.1:534.8

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya. Svodnyy tom, Abs. 4B31

AUTHOR: Timoshenko, Ya.A.; Bedritskiy, A.G.; Chernyakova, S.S.

TITLE: Ultrasonic inspection of parts in industry

CITED SOURCE: Sb. <sup>14</sup>Primeneniye ul'trazvuka v mashinostr. Minsk, Nauka i tekhnika, 1964, 34-40

TOPIC TAGS: friction welding, nondestructive test, test method, test instrumentation, ultrasonic inspection, ultrasonic flaw detector/UZD 7 ultrasonic flaw detector

TRANSLATION: The design of the UZD-60 defectoscope<sup>14</sup> was somewhat modified for ultrasonic inspections of parts welded by friction (the tip of the steering rod and rear drive shaft for power selection). With the help of a UZD-7 defectoscope, the adhesive fusion of a braking lining and the quality of fusion of metal and ceramics were ultrasonically inspected; the joining of a disc with its friction cover plate were UDM-IM tested. Inspections of the above mentioned parts took from 10 to 30 seconds. 3 figures.

L. Tsukerman

SUB CODE: 13,14,20/

SUBM DATE: none

Card 1/1 vmb

14(10)

SOV/98-59-2-9/22

AUTHOR: Timoshenko, Ya.V., Engineer

TITLE: Determining Speeds of Currents in Tail Waters Behind Spillway Dams (A Plane Problem) (Opredeleniye skorostey v nizhnem b'yefe za vodoslivnymi plotinami (Ploskaya zadacha)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 2, p 36-40 (USSR)

ABSTRACT: The author presents an analytical, graphic and experimental solution to the problem of defining speeds in tail waters behind spillway dams in any given part of a stream, in the sector of spreading of a sudden hydraulic surge (gidravlicheskiy pryzhok) by means of functions calculated and coordinated with empirical data for a "free jet" ("svobodnaya struya"). The definition of the speed could

Card 1/3

14(10)

SOV/98-59-2-9/22

Determining Speeds of Currents in Tail  
Waters Behind Spillway Dams

be used for a correct solution of problems connected with the elimination of damage to aprons constructed in tail waters. The research was done in 1956 in the gidravli-cheskaya laboratoriya Instituta gidrologii i gidrotekhniki AN USSR (the Hydraulic Laboratory of the Institute of Hydrology and Hydraulic Engineering of the AS UkrSSR). The following scientists were mentioned by the author in connection with the solution of this problem: I.M. Konovalov, S.A. Syrkin,

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14(10)

BOV/98-59-2-9/22

Determining Speeds of Currents in Tail  
Waters Behind Spillway Dams

G.I. Abramovich, B.A. Turkus, V.V. Baturin,  
S.A. Predvoditelev, Ye.V. Stupchenko, G.V.  
Proskura, G.V. Vostrzhel and D.I. Kumin.  
There are 4 graphs, 1 diagram, 1 table and  
7 references, 6 of which are Soviet and 1  
German.

ASSOCIATION:

Gidravlicheskaya laboratoriya Instituta  
gidrologii i gidrotekhniki AN USSR (Hydraulic  
Laboratory of the Institute of Hydrology and  
Hydraulic Engineering of the AS UkrSSR)

Card 3/3



TIMOSHENKO, Ye., mladshiy serzhant.

Signal call for the DSA receiver. Voen. sviaz. 16 no. 2:46 P '58.  
(Military telegraph) (MIRA 11:3)

RYASHENTSEV, N.P., kand. tekhn. nauk; MALOV, A.T.; KAZANOV, V.D.;  
TIMOSHENKO, Ye.M., kand. tekhn. nauk; FROLOV, A.V., kand.  
tekhn. nauk

Introducing a riveter with an electromagnetic percussion unit  
for riveting hinged joints. Biul. tekhn.-ekon. inform. Gos.  
nauch.-issl. inst. nauch. i tekhn. inform. 18 no.10:18-19  
0 '65. (MIRA 18:12)

MINKEVICH, L.M., inzh.; RYASHENTSEV, N.I., kand.tekhn.nauk; TIMOSHENKO, Ye.M.,  
inzh.; FROLOV, A.V., inzh.

Study of electromagnetic hammers using an analog computer.  
Elektrotehnika 35 no.12:38-40 D '64.

(MIRA 18:4)

ALABUZHEV, F.M., prof.; KYASHENTSEV, N.P., inzh.; TIMOSHENKO, Ye.M.,  
inzh.

Investigation of solenoid impact machines. Izv.vys.ucheb.  
zav.; gor.zhur. no.2:89-97 '59. (MIRA 13:4)

1. Tomskiy ordena Trudovogo Krasnogo Znameni politekhnicheskii  
institut. Rekomendovana kafedroy gornykh mashin i rudnichnogo  
transporta.

(Solenoids)

RYASHEVTSSEV, N.P., kand.tekhn.nauk; TIMOSHENKO, Ye.M., inzh.

Variable inductor for the study of the operations of percussive-action machines. Izv. vys. ucheb. zav.; gor. zhur. no.9:97-102 '60. (MIRA 13:9)

1. Tomskiy ordena Trudovogo Krasnogo Znameni politekhnicheskiiy institut im. S.M.Kirova. Rekomend. kafedroy gorn'nykh mashin i rudnichnogo transporta.  
(Mining machinery) (Electric measurements)

TIMOSHENKO, Ye. Ye.

28-58-2-27/41

AUTHORS: Timoshenko, Ye.Ye., and Sherman, I.Ye., Engineers

TITLE: More Precise Specifications for the Standard for Wooden Parts of Railway Cars (Utochneniya k standartu na derevyannyye detali zheleznodorozhnykh vagonov)

PERIODICAL: Standartizatsiya, 1958, Nr 2, p 61 (USSR)

ABSTRACT: Amendments are suggested to the "GOST 5191-53" standard for wooden parts of wide-track RR-cars. The amendments concern the working of the rules for wood insets (in spots where knots are taken out); the specifications of plywood and wood panels; the surface finish for soaking with antiseptic paste "Vagonka".

ASSOCIATION: Zavod imeni Yegorova (Plant imeni Yegorov)

AVAILABLE: Library of Congress

Card 1/1 1. Railway cars-Construction-Standards 2. Standardization-USSR

TIMOSHENKO, Ye.Ye., inzh.; SHERMAN, I.Ye., inzh.

Specifying standards for wooden parts of railroad cars.  
Standartizatsiia 22 no.2:61 Mr-Ap '58.

(MIRA 11:5)

1. Zavod im. Yegorova.

(Railroads--Cars--Standards)

*11-11-57*  
SHERMAN, I.Ye.; TIMOSHENKO, Ye.Ye.

Efficient method for making moldings. Der.prom.6 no.12:24-25  
D '57. (MIRA 10:12)

(Woodworking machinery)



TIMOSHENKOV, I.A.

Machining stainless steel. Mashinostroitel' no.1:31-32 Ja '57.  
(Steel, Stainless) (Metal cutting) (MLRA 10:4)

L 02141-67

ACC NR: AP6018961

SOURCE CODE: UR/0066/66/000/006/0060/0061

AUTHOR: Timoshenkov, K. D.

ORG: Special Construction Bureau for Instruments, Orel (Orlovskoye CKBPibor) <sup>31</sup>B

TITLE: RV-3-02 pressure relay 10

SOURCE: Kholodil'naya tekhnika, no. 6, 1966, 60-61

TOPIC TAGS: automatic pressure control, refrigeration engineering, refrigeration equipment, pressure transducer, circuit breaking

ABSTRACT: The author describes the development of the new RV-3-02 scale pressure relay at the Orlov Special Design Office for Instruments. This relay was designed to prevent critical pressure drop in the intake line and pressure build-up in the force line of refrigerators using freon 22. The unit consists of high-pressure and low-pressure transducers. These transducers act on a common set of electric contacts. The low-pressure transducer opens the contacts if pressure falls to a preadjusted setting in the intake line and the high-pressure transducer opens the contacts when pressure increases in the force line. Experimental models of the RD-3-02 pressure relay were subjected to standard tests at the laboratory of reliability of the Special Design Office for Instruments. The test results were totally satisfactory and the unit was accepted by the State Interdepartmental Committee and recommended for production at the Tartu

Card 1/2

L 02441-67

ACC NR: AP6018961

Instrument Building Plant. The relay contacts can be used for breaking circuits up to 150 VA where the voltage at the contacts is 380 vac 50~. The unit can operate at vibrations of 5-50 cps, accelerations up to 10 m/sec<sup>2</sup>, shocks with an acceleration of up to 50 m/sec<sup>2</sup> at a frequency of 80-120 impacts per minute and relative humidity up to 95% providing that the ambient temperature is 20-50°C. This unit is recommended for use in automated refrigeration plants and air conditioning units. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: none

Card

2/2 *gd*

L 19796-66

ACC NR: AP5028520

SOURCE CODE: UR/0206/65/000/020/05/17/0099

AUTHORS: Timoshonkov, K. D.; Sokol'nikova, G. V.; Novitskaya, I. I. 1/

ORG: none

TITLE: Thermoregulator for stabilizing temperature drops. Class 42, No. 175755  
/announced by Special Construction Bureau for Instrument Manufacture and Means of  
Automation (Spetsial'noye konstruktorskoye byuro po priborostroyeniyyu i avtomatizatsii)/

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 99

TOPIC TAGS: thermostat, temperature control

ABSTRACT: This Author Certificate presents a thermoregulator for stabilizing temperature drops, which contains two thermosensitive systems consisting of a siphon and a thermobottle and a system of levers of a transmission mechanism and a switching mechanism. To allow the stabilization of the difference of two different temperatures and to improve the regulation, the comparison element is mounted on the rod joining the siphons. The comparison element is connected to the

Card 1/2

UDC: 62-555.6

2402 31747

L 19396-66

ACC NR: AP5028520

switching mechanism by means of a free-play coupling with regulated motion.

SUB CODE: 13/

SUBM DATE: 02Mar64

Card 2/2

57

1. 10788-50 EWT(S)/EST(1)/ENT(E)/INF(I)/222  
ACC NR: AP6018598

SOURCE CODE: UR/0420/66/000/004/0010/0016

AUTHOR: Kormilov, N. I.; Timoshenkov, V. P.

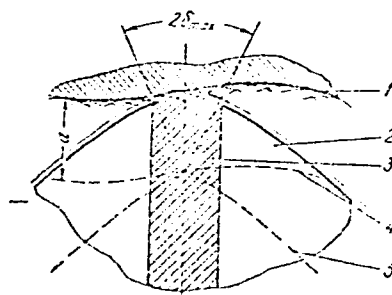
ORG: Kharkov Aviation Institute (Khar'kovskiy aviatsionnyy institut)

TITLE: Investigation of radial sealing in a rotary engine <sup>21</sup>

SOURCE: Samoletostroyeniye i tekhnika vozdushnogo flota, no. 4, 1965, 10-16

TOPIC TAGS: internal combustion engine, rotating seal, sealing device, Wankel engine

ABSTRACT: The authors consider some of the problems associated with increasing the number of radial sealing plates in the Wankel engine to increase compression as a means for converting these engines to diesel operation. In Wankel NSU motors, the triangular rotor uses the type of seal shown in the accompanying figure where 1 is the engine stator, 2 is a section of the rotor and 3 is the sealing plate. The seal is rounded by a radius  $a$  equal to the distance from the theoretical to the actual profile of the engine stator. The center of curvature moves along the original theoretical epitrochoid 4 while the line of



Card 1/2

L 140788-66

ACC NR: AP6018598

contact between the surfaces of the radial sealing plate and the actual working cavity moves with respect to the rounded end of the plate within an angle  $\delta$ . Consideration is given to the effect of the distance  $a$  on the compression of the engine and the operating conditions of the radial seals. An increase in this parameter would make it possible to increase the contact surface of the radial sealing plate and to reduce the specific pressure on the friction surfaces. An increase in  $a$  would also make room for two or more sealing plates at the rotor tips and would simplify machining of the stator surface. It is shown that it is possible to increase the parameter  $a$  while maintaining the basic engine parameters: the working volume and degree of compression. Orig. art. has: 5 figures, 8 formulas.

SUB CODE: 33, 21/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 003

Card 2/2 MLP

L 19396-66

ACC NR: AP5028520

SOURCE CODE: UR/0286/65/000/020/0099/0099

AUTHORS: Timoshenkov, K. D.; Sokol'nikova, G. V.; Novitskaya, I. I. 17

ORG: none 15

TITLE: Thermoregulator for stabilizing temperature drops. Class 42, No. 175755  
/announced by Special Construction Bureau for Instrument Manufacture and Means of  
Automation (Spetsial'noye konstruktorskoye byuro po priborostroyeniyu i sredstvam  
avtomatizatsii)/

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 99

TOPIC TAGS: thermostat, temperature control

ABSTRACT: This Author Certificate presents a thermoregulator for stabilizing temperature drops, which contains two thermosensitive systems consisting of a sylphon and a thermobottle and a system of levers of a transmission mechanism and a switching mechanism. To allow the stabilization of the difference of two different temperatures and to improve the regulation, the comparison element is mounted on the rod joining the sylphons. The comparison element is connected to the

Card 1/2

UDC: 62-555.6



L 19396-66

ACC NR: AP5028520

switching mechanism by means of a free-play coupling with regulated motion.

SUB CODE: 13/

SUBM DATE: 02Mar64

Card 2/2

ST

S/120/61/000/<sup>27709</sup>003/021/041  
E032/E314

9,4160

AUTHORS: Khlebnikov, N.S., Melamid, A.Ye. and  
Timoshenkov, Yu.A.

TITLE: A Photomultiplier Sensitive Down to 1 300 Å

PERIODICAL: Pribery i tekhnika eksperimenta, 1961, No. 3,  
pp. 129 - 131

TEXT: The shortwave limit of a photomultiplier has been extended by the present authors by the use of a "wavelength-shifter", i.e. the short wavelength radiation is converted into a longer wavelength radiation with the aid of a suitable phosphor. It was found that the best results were obtained with the ЖЕС-9 (ZhS-9) glass plate, 0.1 mm thick. Fig. 1 shows the spectral characteristics of the photomultiplier ФЭУ-Р5 (FEU-R5) with different materials used for the entrance window. Curve 1 was obtained with "optical glass No. 23" and the R5 photomultiplier; Curve 2 was obtained with a 1 mm thick, high-quality uvio1 glass and an ФЭУ-Р3 (FEU-R3) multiplier and curve 3 was obtained with the ZhS-9 glass (0.1 mm thick) attached with Canada balsam to the Card 1/3

A Photomultiplier ....

27709  
S/120/61/000/003/021/041  
EO32/E314

R5 envelope. Curve 3 could not be extended at the time to below 2 030 Å owing to lack of a suitable monochromator. However, there is evidence showing that the sensitivity remains quite appreciable down to 1 500 Å. The present authors' recent measurements, using a vacuum monochromator, have yielded the curve shown in Fig. 2. Fig. 4 shows the light output of the ZhS-9 glass as a function of thickness (mm). There are 4 figures and 1 table.

SUBMITTED: August 2, 1960

Card 2/3

ZAGRYAZKIN, N.N.; TIMOSHENKO, Yu.I.

Flame propagation following the ignition with a stabilized and  
unstabilized electric spark. Trudy Inst. dvig. no.6:110-117  
'62.

(Gas and oil engines--Ignition)

(MIRA 16:5)

5  
1  
1

TIMOSHEV, N.P.

Cervical chondroma. Vest.oto-rin. 20 no.5:127 S-0 '58 (MIRA 11:12)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. dots. Ya.D.  
Missionzhni) Zaporozhskogo instituta usovershenstvovaniya vrachey:  
(NECK, neoplasms,  
chondroma in child (Rus))  
(CHONDROMA, in infant & child,  
neck (Rus))

NABOK, N.I.; TIMOSHINA, N.P.

Preparation of the steel reinforcement in the manufacture of rubber-carcass gaskets with the gluing method of rubber to metal bonding. Kauch. i rez. 23 no.7:48-49 J1 '64.

(MIRA 17:8)

1. Moskovskiy zavod rezino-tekhnicheskikh izdeliy No.1.

TIMOSHEV, N.P.

Rare foreign body in the esophagus. Zhur.uch., nos. i gorl. bol.  
24 no.5:84 S-O '64. (MIRA 18:3)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - dotsent I.M.  
Ispuganov) Zaporozhskogo instituta usovershenstvovaniya vrachev  
imeni M.Gor'kogo.

S/124/63/000/003/048/065  
D234/D308

AUTHOR: Timoshenko, V. G.

TITLE: Mechanical vibrational systems with hysteresis losses

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 3, 1963, 27, abstract 3V181 (In collection: Vopr. rasseyaniya energii pri kolebaniyakh uprugikh sistem. Kiev, Gos. izd-vo tekhn. lit. USSR, 1962, 28-35)

TEXT: The author discusses the calculation of forced vibrations of a mechanical system with damping, taking into account the hysteresis which leads to a damping force whose magnitude is proportional to the amplitude and whose phase coincides with the velocity. The corresponding differential equation of the vibrations has a complex factor of the restoring force. The author uses the magnitude of impedance for the design of such a system, as well as for the investigation of the wave problem for a long torsional line with a similar law of damping. /-Abstracter's note: Complete translation. /

Card 1/1



SPERANSKAYA, I.M.; KRUTOUS, M.P.; TIMOSHENKO, V.I.

Some petrographic characteristics and properties of feldspars  
in igneous rocks of the Armanskaya volcanic and plutonic  
association (Maritime Territory). Trudy Lab. paleovulk. Kazakh.  
gos. un. no.56:73-83 '63. (MIRA 16:6)

1. Severo-Vostochnoye geologicheskoye upravleniye.  
(Maritime Territory—Feldspar)

TIMOSHENKO, V.L. [Tymoshenko, V.L.]

Batcher for the application of fumigants. Mekh. sil'. hosp. 14  
no.6:15-16 Je '63. (MIRA 17:3)

1. Zaveduyushchiy otделom mekhanizatsii Krymskoy opytnoy stantsii.

L 18222-63 EPR/EPA(b)/EWT(1)/BDS AFFTC/ASD Ps-4/Pd-4 WW  
ACCESSION NR: AT3001865 S/2909/62/000/006/0110/0117

AUTHORS: Zagryazkin, N.N.; Timoshenko, Yu.I. 64

TITLE: Development of a flame following ignition by a stabilized and a nonstabilized electric spark

SOURCE: AN SSSR. Institut dvigateley. Trudy, no. 6, 1962, 110-117.

TOPIC TAGS: engine, internal combustion, ignition, spark, spark plug, plug, gap, ionization, advance, fuel-air ratio, electrode, testing equipment.

ABSTRACT: This paper examines the influence of the spark and, more especially, its energy on the development of the resulting combustion flame. An experimental investigation was performed in a turbulent gaseous flow, since the latter permits the maintenance of prescribed parameters of turbulence, composition, temperature, and pressure. The development of the flame was observed and recorded by stria-tion (schlieren) cinematography (SP). The test setup comprised a blower, a plenum chamber, an electric heater, a carburizing mixer, and a combustion chamber 150 cm long, equipped with an observation window. Turbulence grids were employed to achieve an isotropic turbulence of specific intensity. The spark plug was placed 75 mm downstream from the turbulence grid. The SP equipment

Card 1/3

L 18222-63

ACCESSION NR: AT3001865

made photographs at 6 streamwise points. 3 groups of tests were performed:

1. Tests with a substantial artificial change in spark power.
2. Tests with a standard automotive ignition equipment (without any attempts to stabilize the spark energy).
3. Tests with a stabilized spark plug, namely, with the use of a 3-electrode plug in which an auxiliary electrode (E) established a first, ionizing, discharge to bridge the gap between the main E and the grounded E and thereby stabilize the main spark discharge.

Preliminary conclusions:

1. It is shown that the oscillations of the spark energy are one of the reasons for the unevenness of the cycles of a piston engine running on a lean mixture, limiting thereby further improvements in fuel economy.
2. Experimentation in a turbulent fuel-air mixture has shown that the minimal spark energy required for the ignition of a fuel-air mixture is significantly greater in a turbulent flow than in a laminar flow. The uniformity of the development of the combustion flame in a turbulent flow improves substantially when the spark energy is increased above the minimum practicable value. This, in particular, explains the improvement of the evenness of the combustion cycle in a richer mixture.
3. The time required for the development of separate flames, arising from a series of successive sparks delivered by an automotive ignition system, varies appreciably. This instability with time decreases from 80 to 60 percent, when the spark gap is increased by 20 percent.
4. An explanation is provided for the possible oscillations of the magnitude of the

Card 2/3

L 18222-63

ACCESSION NR: AT3001865

spark energy under pulse-type voltage delivery to the spark-plug electrodes in an automotive-type ignition system; the probable limits of the energy oscillations, depending on the fluctuations in the gas ionization, were not determined. 5. The use of a discharge electrode for the stabilization of the magnitude of the main-spark energy helped to maintain a more constant energy in a series of sparks and its independence from pressure (within narrow limits of variation). 6. The experimental investigation of ignition by means of a stabilized spark have shown a decrease in the instability of the development of the combustion flame in a turbulent flow of 12-18 percent ( $\theta = 0.12$  to  $0.18$ ). Orig. art. has 9 figures and 4 equations.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 11Apr63

ENCL: 00

SUB CODE: CH, PH, PR.

NO REF SOV: 007

OTHER: 003

Card 3/3

LADYZHENSKAYA, N.V.; GULIDOVA, L.A.; TIMOSHENKO, Z.F. (Dzerzhinsk,  
Gor'kovskoy obl.); ZEREKIDZE, R.I.

From the practices in the use of poisonous chemicals. Zashch.  
rast. ot vred. i bol. 9 no.3:24-25 '64. . (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh  
sredstv zashchity rasteniy (for Ladyzhenskaya, Gulidova).
2. Zavoduyushchiy otdelom zashchity rasteniy Gruzinskoy  
selektsionno-opytnoy stantsii Vsesoyuznogo instituta kukuruzy,  
Mtskhetskii rayon (for Zerekidze).

L 35541-65 EWT(m)/EWA(d)/T

ACCESSION NR: AP5008183

3/0286/65/000/005/0058/0058

AUTHORS: Ivanov, G. S.; Kogan, P. S.; Kazarnovskiy, S. N.; Bodrikov, I. V.;  
Timoshenko, Z. F.; Matuzova, L. S.

14  
B

TITLE: A method for producing nonionogenic surface active substance. <sup>1</sup> Class 23,  
No. 168832 <sup>15</sup>

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 58

TOPIC TAGS: surface active substance, hydrocarbon, pyrolysis

ABSTRACT: This Author Certificate presents a method for producing nonionogenic surface-active substance such as polyglycol ethyl alkylphenol by reaction of phenol with the hydrocarbon fraction of petroleum-product pyrolysis, and by subsequent hydroxyethyl processing. To expand the raw-material base and to reduce cost of the product, the phenol is subjected to alkylation by a hydrocarbon fraction of petroleum-product pyrolysis consisting of 2-3% (by volume) of propane and propylene, 29-37% isobutylene, 32-42% butylene, 12-20% divinyl, 2-4% butane, and 7-13% C<sub>5</sub> and higher, with subsequent hydroxyethyl processing by the standard method.

ASSOCIATION: none

Card 1/2 (





KARAS', L.Ya.; TAGER, A.A.; Frininali uchastiye: TIMOSHENKO, Zh.D.;  
SHCHEGLOVA, R.S.

Mechanical properties of space-polyurethanes prepared on the basis  
of polydiethylene succinate, polydiethylene adipinate, and polydiethylene  
sebacinate. Vysokom. soed. 7 no.5:891-897 My '65. (MIRA 18:9)

1. Ural'skiy gosudarstvennyy universitet imeni A.M.Gor'kogo.

TIMOSHENKOV, A.I.

Production of bellows from polytetrafluoroethylene. Khim. i nef.  
mashtinstro. 61.6836-67 1964 (MIRA 18:2)

1ST AND 2ND CROPS																										3RD AND 4TH CROPS																									
PROCESSES AND PROPERTIES INDEX																																																			
<p>The recovery of fluorine-containing gases in the super-phosphate industry. V. G. Timoshchev. <i>J. Chem. Ind. (Moscow)</i> 1934, No. 1, 66-72.—The theoretical reasons for the various steps in the absorption of <math>\text{SiF}_4</math> are discussed. H. M. Leicester</p> <p style="text-align: right;">Zhu-Khiu. P. 601.</p>																																																			
<p>ASAC 31 A METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			

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1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																																																			
<p><i>ca</i></p> <p><i>7</i></p> <p>The determination of sulfur in pyrites and slag. V. G. Timoshev and R. V. Mirolubov. <i>J. Chem. Ind. (U. S. S. R.)</i> 16, 996-1000(1937).—An elec. furnace is described in which the temp. can be raised from 450° to 980° in 5-7 min. for complete burning of pyrites or slag. The SO<sub>2</sub> formed is absorbed and titrated. An analysis can be completed in 15 min. H. M. Leicester</p> <p><i>Zhur. Khim. Prom</i></p>																																																			
<p>ASB-SLA DETALLURGICAL LITERATURE CLASSIFICATION</p>																																																			

1ST AND 2ND COLUMNS																										3RD AND 4TH COLUMNS																									
PROCESSES AND PROPERTIES INDEX																																																			
<p>104</p> <p>2</p> <p>Electric furnaces for elementary analysis. V. G. Luno- shch and R. V. Mirolubov. Russ. 52,032, March 31, 1938. Constructional details.</p>																																																			
<p>ASB-11.4 METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			
<p>1ST AND 2ND COLUMNS</p> <p>3RD AND 4TH COLUMNS</p>																																																			

CA

1

Apparatus for the determination of  $\text{SO}_2$ . V. G. Timoshov. Russ. 66,667, August 31, 1950. Construction details of an app. for the absorption of  $\text{SO}_2$  in  $\text{H}_2\text{O}$ , and titration with a soln. of alkali.

ASAC-ELA METALLURGICAL LITERATURE CLASSIFICATION

1950M BROWNV

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1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																																																			
CA																										7																									
<p>Determination of carbon and sulfur in carbonaceous pyrites. V. G. Timoshin and A. T. Shoshin. <i>Zhurnal Khim. S. 790-91 (1939).</i>—Gases formed in the combustion of a 0.25-g. sample were passed through 2 absorbers; the <math>SO_2</math> was absorbed in 1.5% <math>H_2O_2</math> in the first absorber and the <math>CO_2</math> in a second absorber contg. 50 ml. 0.8333 N KOH. The <math>H_2SO_4</math> formed in the first absorber was titrated with 0.3125 N KOH or NaOH. <math>BaCO_3</math> was added to the second absorber and the excess KOH titrated with 0.8333 N HOAc. The app., procedures and calcs. are given in detail. B. Z. Kamich</p>																																																			
<p>458-554 METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			



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PROCESSES AND PROPERTIES INDEX

Determination of moisture and sulfur in sulfur concentrates and flotation tailings. V. G. Timonchev. *Zarod. shaya Lab. S.* No. 10-11, 11(41)-3(1939); *Khim. Referat. Zhur.* 1940, No. 4, 50.—Moisture is detd. from loss in wt. of a 0.5-g. sample in the elec. oven (which is used for detg. S in pyrites and scoria, cf. C. A. 34, 48<sup>9</sup>) at 170° during 10 min. No oxidation of S, no retention of moisture (owing to the formation of a crust) and no pulverization of the sample during the expts. were observed. S is detd. in the same sample after the detn. of moisture. The total time needed for detg. the moisture and S is 25-30 min. The deviations of results in samples contg. up to 8% of moisture were 0.0% from results obtained by drying in the oven at 105-10°. The difference in results obtained by the proposed method and by the Lunge method was 0.7% in samples contg. 48% of S. The method is recommended for controlling S-contg. raw material with not more than 5% of moisture. W. R. Henn

ASB.SLH METALLURGICAL LITERATURE CLASSIFICATION

GROUP 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



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CA

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS

100 AND 1TH ORDERS

The calculation of the heat capacity of sulfuric acid.  
V. G. Tynoshy and A. V. Abramova. *J. Chem. Ind.*  
(U.S.S.R.) 17, No. 12, 24(1940). Empirical equations  
are given for calc. the heat capacity of  $H_2SO_4$ . For concd.  
acid (oil of vitriol, desiccator acid, tech. monohydrate)  
 $C = 2.12e^{-0.00044(t-60)}$ , where  $C$  = heat  
capacity,  $t$  = percentage concn. of  $H_2SO_4$ , and  $t$  = temp.  
For tower acid  $C = 0.0025 - 0.0025t + 0.00044t$ .  
For chamber acid  $C = 0.0025 - 0.00044t + 0.00044t$ .  
H. M. Lehester

Zhu-Khu-Pan.

ASR-5LA METALLURGICAL LITERATURE CLASSIFICATION

GROUPS

1ST AND 2ND ORDERS

100 AND 1TH ORDERS

21(1), 5(2)

SOV/89-6-4-5/27

AUTHORS:

Shevchenko, V. B., Timoshev, V. G., Volkova, A. A.

TITLE:

The Stability Constants of the Nitrate Complexes of Trivalent Plutonium and Tributyl Phosphate Solutions (Konstanty ustoychivosti nitratnykh kompleksov trekhvalentnogo plutoniya v vodnykh i tributilfosfatnykh rastvorakh)

PERIODICAL: Atomnaya energiya, 1959, Vol 6, Nr 4, pp 426-430 (USSR)

ABSTRACT:

The distribution of nitric acid and plutonium nitrate between the aqueous phase and tributyl phosphate (TBP) dissolved in benzene is measured. Extraction was carried out in calibrated test tubes. Mixing of phases was carried out mechanically. The initial quantities for the aqueous and organic solutions were 5 ml. All chemicals were especially purified before the experiments. Thus, the water content of TBP was only 0.11%. The reduction of the Pu from the aqueous plutonium nitrate solution ( $\sim 5 \cdot 10^{-4}$  M) and from hydrazine nitrate (0.2 M) was carried out at 50-60° in the course of 3-4 hours. Plutonium valence was measured and calculated respectively both spectrophotometrically as also from the constancy of the plutonium distribution coefficient at the various reduction steps (from one

Card 1/2

SOV/89-6-4-5/27

The Stability Constants of the Nitrate Complexes of Trivalent Plutonium and Tributyl Phosphate Solutions

and the same aqueous solution). The plutonium content in the aqueous and organic phases was determined radiometrically. Hydrazine concentration was measured by titration of the hydrazine solution with potassium permanganate in a hydrochloric acid medium in the presence of ammonium vanadate. It could be shown that trivalent plutonium is extracted from a solution combined with nitric acid by TBF in form of  $\text{Pu}(\text{NO}_3)_3 \cdot 3\text{TBF}$  (nitration concentration up to 1.2 M). In the case of the aforementioned experimental conditions, the distribution coefficient of trivalent plutonium does not depend on hydrogen ion concentration. The measured values are given in tables and partly in form of graphs. Good agreement was found between calculated and measured distribution coefficients. The stability constants for various plutonium complexes were determined as follows:

$\text{Pu}(\text{NO}_3)_3 \cdot 3\text{TBF}$	$0.75 \pm 0.10$	$\text{Pu}(\text{NO}_3)_3$	$14.4 \pm 0.8$
$\text{Pu}(\text{NO}_3)_2^+$	$14.3 \pm 0.8$	$\text{Pu}(\text{NO}_3)_2^{2+}$	$5.9 \pm 0.5$

There are 3 figures, 5 tables, and 14 references, 10 of which are Soviet.  
May 16, 1958

SUBMITTED:  
Card 2/2

5(1)

AUTHORS:

Timoshev, V. G., Rodionov, A. V.,  
Koltunov, V. S., Chumakov, P. S.

SOV/32-25-3-54/62

TITLE:

Laboratory Extractor With Gas Lifter (Laboratornyy ekstraktor  
s gazoliftom)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 3, pp 377-378 (USSR)

ABSTRACT:

The described extractor with gas lifter is practically a set of individual parts in which each of the individual parts has roughly the effect of 0.95 of a theoretical plate. Thus, by changing the number of individual parts, the extractor may be adjusted to whatever efficiency is needed. In the present case a device composed of 48 sections, i.e. corresponding to 45 theoretical plates, was used. The sketch of an individual part of the extractor is given (Fig) by means of which the operation of the device is described. The extractor may be used for the extraction-separation of substances, and for various technical processes based on liquid extraction. There is 1 figure.

Card 1/1

TIMOSHEV, V.G.; PETROV, K.A.; RODIONOV, A.V.; BALANDINA, V.V.; VOLKOVA, A.A.;  
YEL'KINA, A.V.; MAGNIBEDA, Z.I.

Extraction capacity of neutral, oxygen-containing organic substances.  
Radiokhimiia 2 no.4:410-425 '60. (MLA 13:9)  
(Extraction (Chemistry))

PETROV, K.A.; SHEVCHENKO, V.B.; TIMOSHEV, V.G.; MAKLYAYEV, F.A.; FOKIN,  
A.V.; RODIONOV, A.V.; BALANDINA, V.V.; YEL'KINA, A.V.; MAGNIBIDA,  
Z.I.; VOLKOVA, A.A.

Alkyl phosphonates, diphosphonates, and phosphine oxides as  
extracting agents. Zhur.neorg.khim. 5 no.2:498-502  
Z '60.

(MIRA 13:6)

(Phosphonic acid) (Phosphine oxide)  
(Extraction(Chemistry))



S/830/62/000/001/002/012  
E111/E192

AUTHORS: Timoshev, V.G., Petrov, K.A., Rodionov, A.V.,  
Balandina, V.V., Volkova, A.A., Yel'kina, A.V., and  
Nagnibeda, Z.I.

TITLE: Importance of the structure and physical state of  
extraction-solvent molecules

SOURCE: Ekstraktsiya; teoriya, primeneniye, apparatura.  
Ed. by A.P. Zefirov and M.M. Senyavin.  
Moscow, Gosatomizdat, 1962. 88-103.

TEXT: Taking the criterion of extraction ability as the  
distribution coefficient, and the ratio  $B$  (the number of hydrogen  
to the number of carbon atoms in the solvent), the authors study  
the distribution of uranyl, plutonium (IV), zirconium and niobium  
nitrates. The feed comprised 0.5 - 1 or 2 N aq. nitric acid  
solution. Extracting with orthoformates and phosphates the  
extractive ability falls with decreasing  $B$  values - steric  
hindrance playing an important part. With phosphonates the  
opposite relation holds - the water solubility of the lower  
homologues and their polymerization being important factors.  
Card 1/2

Importance of the structure and ...

S/830/62/000/001/002/012  
E111/E192

The extractive ability of phosphonates increases at the same time as the alkyl radicals become less electrophilic and the solvents less soluble; however, when the radicals become comparatively large, steric hindrances become decisive and extractive ability falls sharply in spite of reduced solubility. The same holds for phosphine oxides and amines. Further work to generalize these relations is contemplated. There are 15 figures.

Card 2/2

TIMOSHEVICH, B.P., elektromekhanik; SHOTT, I.M., elektromekhanik

Change in the circuit of the PS-2m signaling stand. Avtom.,  
telem. i svyaz' 4 no. 12:35 D '60. (MIRA 14:1)

1. Minskaya distantiya signalizatsii i svyazi Belorusskoy dorogi.  
(Railroads--Communication systems)

TIROS, LEVSHAYA, V. K.

"A Few Words About the Determination of the Purity of 2,5-Dimethylpyrrol and Pyrrol." by V. K. Tiroshevskaya. (p. 175)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1952, Volume 22, No. 1

TIMOSHENKO, N.M.

Measurement of pulse durations of pendulum transmitters.  
Avtom.telem. i sviaz' 3 no.12:36 D '59. (MIRA 13:4)

1. Starshiy inzhener laboratorii signalizatsii i svyazi Yugo-Zapadnoy dorogi.  
(Electric measurements)

TIMOSHEVSKAYA, N. M.

"Research in the Field of Pyrrole Derivatives -- I. Syntheses of Certain N-Alkyl-Substituted 2,5-Dimethylpyrrol-3(4)-Monocarbon Esters," Zhur. Obshch. Khim., 9, No. 5, 1939. Institute of Chemistry, Khar'kov State University imeni A. M. Gor'kiy, Laboratory of Professor Yu. V. Korshun. Received 14, June 1938.

Report U-1517, 22 Oct 1951

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																										PROCESSES AND PROPERTIES INDEX																									
<div style="text-align: center;"> <p>ca</p> <p>10</p> <p>Preparation of 2,5-dimethylpyrrole from the corresponding monocarboxylic ester. N. M. Timoshkevichaya. <i>J. Gen. Chem.</i> (U. S. S. R.) 9, 760 (1939). -- 2,5-Dimethylpyrrole (I) has been obtained by heating 2,5-dimethylpyrrolecarboxylic ester with an excess of slightly moist soda lime in the presence of a small amt. of ether. A temp. of 80-90° is kept for 10-15 min.; it is then raised until distn. of H<sub>2</sub>O starts. The distillate contains I in the form of an emulsion. Most of the distn. is carried out at 100-20°. The end temp. is 135-40°. I is extd.</p> <p>91-2°, is obtained in 92% yield by reduction of 8-[2-(9,10-dihydrophenanthroyl)propionic acid with amalgamated Zn in the same way as above. For the prepn. of <math>\gamma</math>-(2-phenanthryl)butyric acid (VIII), HCl is passed into 10 g. VII in 300 cc. MeOH for 0.5 hr. and the soln. refluxed for 1 hr. HCl is passed again into the cool soln. for 0.5 hr. and the soln. is refluxed for another hr., the</p> </div>																																																			
<div style="display: flex; justify-content: space-between;"> <span>558-SLA METALLURGICAL LITERATURE CLASSIFICATION</span> <span>227-12-11-11</span> </div>																																																			

PROCESSES AND PROPERTIES OF  
Pyrrole compounds. I. The synthesis of some *N*-alkyl-substituted 2,5-dimethylpyrrole-3-monocarboxylic esters. N. M. Timoshevskaya. *J. Gen. Chem.* (U. S. S. R.) 9, 406-8 (1939).—Compds. of the type MeC·CH·C-

(CO<sub>2</sub>Et):CMe.NR can be obtained in 9-15% yields by adding AcCH<sub>3</sub>CO<sub>2</sub>Et to NaOEt, treating the mixt. with ClCH<sub>2</sub>COMe and then with an aliphatic amine. The temp. should never rise above room temp. and the products should be distd. the day they are prepd. In this way are obtained the compds. in which R is Me, m. 48°, b. 128-9°; Et, m. 25-6°, b. 133-4°; Pr, m. 44.5°, b. 144°; and Bu, m. below 16-16°, b. 162-3°. H. M. L.

Molecular association of pyrrolealdehydes. P. Pratesi and V. Berti. *Atti X<sup>o</sup> Congr. intern. chim.* 3, 313-17 (1930).—The pyrrolealdehydes, non-substituted on the N, are anomalous in their chem. behavior toward HCN, Schiff's reagent and dioxammonia (NH(OH)<sub>2</sub>). The assumption of an equil. between the aldehyde and hydroxymethylene forms does not completely interpret all the various reactions of these aldehydes. The simplest α-pyrrolealdehyde which is anomalous in its chem. behavior is notably assocd. in soln. It is shown that although 2,4-dimethyl-5-pyrrolealdehyde, m. 60°, and 2,4-dimethyl-3-ethyl-5-pyrrolealdehyde, m. 105-6°, are strongly assocd. in benzene soln. except at high dilns., *N*-methyl-α-pyrrolealdehyde, b. 77-8°, is absolutely monomol. in benzene soln. as shown by cryoscopic detns. This investigation will be extended to see whether the anomalous behavior is due solely to assocn. or to a secondary action of the heterocyclic nucleus on the CHO group. C. R. Addinall



TIMOSHEVSKIY, Dmitriy Filippovich; DEMENT'YEV, V.A., red.;  
GERASIMOVA, Ye.S., tekhn.red.

[The law of value and problems of price determination]  
Zakon stoimosti i problemy tsenoobrazovaniia. Moskva,  
Ekonomika, 1964. 65 p. (MIRA 17:3)

TIMOSHEVSKIY, G.

How to carry out the provisions of the Krasnodarsk Territory budget.  
Fin.SSR 15 no.10:48-51 0'54. (MLRA 8:2)

1. Zaveduyushchiy Krasnodarskim krayfinotdelom.  
(Krasnodarsk Territory--Budget)

8/089/63/014/003/012/020  
B102/B186

AUTHORS: Korda, Yu. S., Timoshevskiy, G. F., Remayev, V. V.

TITLE: Photo-efficiency of a NaI(Tl) crystal for non-collimated  $\gamma$ -radiation

PERIODICAL: Atomnaya energiya, v. 14, no. 3, 1963, 319 - 320

TEXT: The authors used a direct stochastic method for calculating the photo-efficiency ( $\epsilon$ ) for a NaI(Tl) crystal ( $\phi = 29$ ,  $h = 15$  mm) hit by a divergent beam of  $\gamma$ -rays ( $60 \text{ keV} \leq E_\gamma \leq 1.5 \text{ MeV}$ ) emitted from a point source (S). Pair production and emission of quanta with  $E_\gamma \leq 40 \text{ keV}$  from the crystal are neglected. The error amounts to 2 %. There is 1 figure.

SUBMITTED: June 27, 1962

Card 1/2

Photo-efficiency of a ...

S/089/63/014/003/012/020  
B102/B186

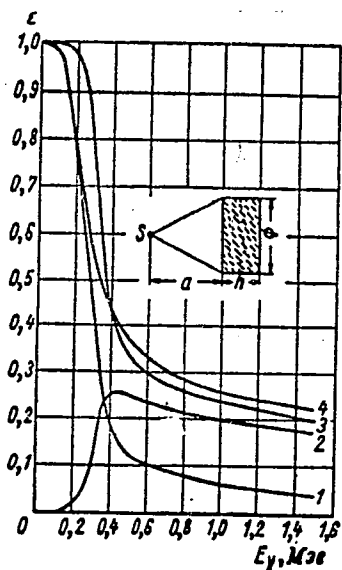


Figure.  $\epsilon$  as a function of  $E_\gamma$  (MeV) for  
 $a = 36$  mm. (1) Photoregistration; (2)  
Compton registration; (3) photo-inter-  
action ( $N_{ph}/(N_{Compt} + N_{ph})$ ); (4) total  
efficiency.

Card 2/2

TIMOSHEVSKIY, G.F.; VANETSIAN, R.A.; KLYUCHAREV, A.P.; FEDCHENKO, Ye.D.

Compound-elastic scattering in elastic scattering of 5.45 Mev.  
protons on nickel isotopes. Zhur. eksp. i teor. fiz. 45  
no.6:1951-1953 D '63. (MIRA 17:2)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.

KORDA, Yu.S.; TIMOSHEVSKIY, G.F.; REMAYEV, V.V.

Detection efficiency of a NaI(Tl) crystal for noncollimated  
 $\gamma$ -radiation. Atom. energ. 14 no.3:319-320 Mr '63.

(MIRA 16:2)

(Photoelectricity) (Scintillation counters)  
(Gamma rays)

VANETSIAN, R.A.; KLYUCHAREV, A.P. [Kliuchariev, A.P.]; TIMOSHEVSKIY, G.F.  
[Tymoshevs'kyi, H.F.]; FEDCHENKO, Ye.D. [Fedchenko, IE.D.]

Calculation of the elastic scattering of 19.6 MeV protons by  
the use of an optical nuclear model. Izv. fiz. zhur. 7 no.4:  
378-382 Ap '62. (MIRA 15:8)

1. Fiziko-tekhnicheskii institut AN UkrSSR, g. Khar'kov.  
(Protons--Scattering) (Nuclear optical models)

S/903/62/000/000/017/044  
B102/B234

AUTHORS: Val'ter, A. K., Vanetsian, A. A., Klyucharev, A. P.,  
Timoshevskiy, G. F., Fedchenko, Yo. D.

TITLE: Calculation of the differential elastic scattering cross  
sections of 6.8-Mev protons for nuclei of some Ni, Cu, and Cr  
isotopes on the basis of the optical model of the nucleus

SOURCE: Yadernyye reaktsii pri malykh i srednikh energiakh; trudy  
Vtoroy Vsesoyuznoy konferentsii, iyul' 1960. g. Ed. by  
A. S. Davydov and others. Moscow, Izd-vo AN SSSR, 1962, 191-200

TEXT: To gather information for the choice of optimum parameters and on the  
differential scattering cross sections obtained with these parameters in the  
case of agreement with experiment, optical-model calculations were carried  
out for Cr<sup>53,58</sup>, Ni<sup>60,62</sup>, and Cu<sup>63,65</sup> for  $E_p = 5.45, 6.8$  and  $19.6$  Mev, which  
gives the possibility of obtaining the energy dependence of the parameters.  
The experimental data needed were taken from Atomnaya energiya, 6, 661,  
1959, ZhETF, 38, 1419, 1960. and DAN SSSR, 130, 1009, 1960. The calculations  
Card 1/3



S/903/62/000/000/017/044  
B102/B234

Calculation of the differential...

are made in the usual manner with the potential ansatz

$$V^{\pm}(r) = V_{\text{кул}}(r) + V_0 \frac{1}{1 + e^{-\frac{r-p_0}{ka}}} + iW_0 e^{-\left(\frac{r-p_0}{kb}\right)^2} - \chi \left(\frac{\hbar}{\mu c}\right)^2 \frac{1}{r} \frac{d}{dr} V_{\text{эл}}(sl), \quad (8)$$

$$(sl) = \begin{cases} l & \text{для } l = l + \frac{1}{2}, \\ -(l+1) & \text{для } l = l - \frac{1}{2}, \\ 0 & \text{для } l = 0. \end{cases}$$

where  $V_{\text{кул}}(r)$  is the Coulomb potential. Agreement was best when the following parameters were used:

	$r_0$	$a$	$b$	$V_0$	$W_0$	$V_{\text{эл}}$
Cr <sup>12</sup>	1,23	0,38	0,80	64,7	7,6	92
Ni <sup>12</sup>	1,23	0,38	0,73	68,3	6,6	94
Ni <sup>10</sup>	1,23	0,37	0,74	66,0	6,5	93
Ni <sup>11</sup>	1,23	0,46	0,94	64,0	5,6	53
Cu <sup>12</sup>	1,23	0,46	0,85	63,0	5,5	62
Cu <sup>11</sup>	1,23	0,43	0,85	64,2	5,1	60

Card 2/3

Calculation of the differential...

S/903/62/000/000/017/044  
B102/3234

Conclusions: The position of the extrema in the  $\sigma(\theta)$  curve is mainly determined by the two parameters  $V_0$  and  $r_0$  which are interrelated by  $V_0 r_0^2 = \text{const.}$  Any change of these parameters affects not only the position but also the amplitude of the extremum. When  $V_0$  and  $r_0$  are increased the extremum becomes shifted to smaller angles  $\theta$ . A variation of  $a$  corresponds to rotation of the angular distribution around  $\theta=0^\circ$ ; increasing of  $a$  means rotation in the negative sense. Reduction of  $b$  shifts the extrema toward larger  $\theta$  and raises their amplitude, particularly at large  $\theta$ .  $W$  influences only the height of the extrema. Any alteration of the spin-orbital potential  $V_s$  causes a distortion of the angular distribution especially for  $\theta \geq 120^\circ$ . There are 11 figures and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN USSR (Physicotechnical Institute AS UkrSSR)

Card 3/3

VANETSIAN, R.A.; KLYUCHAREV, A.P.; TIMOSHEVSKIY, G.F.; FEDCHENKO, Ye.D.

Calculating the cross sections of elastic scattering for 5.45  
Mev. protons according to the optical nuclear model. Zhur. eksp.  
i teor. fiz. 40 no.4:1199-1202 Ap '61. (MIRA 14:7)  
(Nuclear models) (Protons--Scattering)